

REMARKS

This Amendment is filed in response to the Office Action dated December 14, 2004, which has a shortened statutory period set to expire March 14, 2005.

Allowed/Allowable Subject Matter

Applicants greatly appreciate the Examiner's indication of allowed and allowable subject matter. Specifically, Claims 78-80, 82-87, 90-99, 101-110, 112-117, 119, and 120 are allowed. Claims 81, 88, 89, 100, 111, and 118 are objected to, but would be allowable if rewritten to overcome the objections due to various minor informalities. Applicants have amended Claims 81, 88, 89, 100, 111, and 118 to address the informalities noted by the Examiner. Based on these amendments and remarks, Applicants request reconsideration and withdrawal of the objection to Claims 81, 88, 89, 100, 111, and 118.

Claims 58-77 Are Patentable Over Eng

Claim 58, as amended, now recites in part:

performing a coarse placement process which assigns initial locations to said cells using floating point coordinates for cell locations;
performing a detailed placement process which assigns a legal location to each of said cells by snapping a cell from its floating point coordinates to a nearest legal location.

Applicants respectfully submit that Eng fails to disclose or suggest these limitations. Eng teaches nothing about floating point coordinates. The Office Action cites paragraph [0188] of Eng as "snapping" cells to legal sites. Applicants traverse this characterization. In paragraph [0188], Eng teaches that compaction can include local movement of blocks.

This local movement does not teach snapping a cell to its nearest legal location. Applicants teach that

This allows for a much simpler implementation of detailed placement, as there is only a single cost function that is localized to each individual cell and is well defined.

Specification, page 15, lines 13-15. Because Eng fails to disclose or suggest these limitations as well as its associated advantages, Applicants request reconsideration and withdrawal of the rejection of Claim 58.

Claims 59-64 depend from Claim 58 and therefore are patentable for at least the reasons presented for Claim 58. Based on those reasons, Applicants request reconsideration and withdrawal of the rejection of Claims 59-64.

Claim 65, as amended now recites in part:

performing a detailed placement process which includes snapping a cell from floating point coordinates to a nearest legal location.

Therefore, Applicants submit that Claim 65 is patentable for substantially the same reasons presented for Claim 58. Based on those reasons, Applicants request reconsideration and withdrawal of the rejection of Claim 65.

Claims 68-70 depend from Claim 65 and therefore are patentable for at least the reasons presented for Claim 65. Based on those reasons, Applicants request reconsideration and withdrawal of the rejection of Claims 68-70.

Claim 71, as amended now recites in part:

performing a detailed placement process having a primary function of legalization, wherein a cell is snapped to its nearest legal site.

Therefore, Applicants submit that Claim 71 is patentable for substantially the same reasons presented for Claim 58.

Based on those reasons, Applicants request reconsideration and withdrawal of the rejection of Claim 71.

Claims 72 and 75-77 depend from Claim 71 and therefore are patentable for at least the reasons presented for Claim 71.

Based on those reasons, Applicants request reconsideration and withdrawal of the rejection of Claims 72 and 75-77.

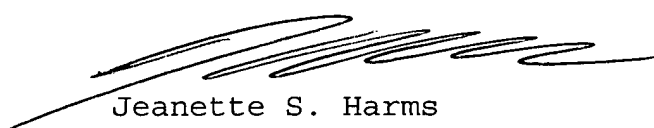
CONCLUSION

Claims 58-65, 68-72, and 75-120 are pending in the present Application. Applicants respectfully request allowance of these claims.

If there are any questions, please telephone the undersigned at 408-451-5907 to expedite prosecution of this case.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as FIRST CLASS MAIL in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 14, 2005.

2/14/2005 
Date Signature: Rebecca A. Baumann